RAJYA SABHA

Tuesday, the 8th May, 1990/18 Vaisakha, 1912 (Saka)

The House met at eleven of the clock, **Mr. Chairman** in the Chair.

ORAL ANSWERS TO QUESTIONS

Completion of the Main Battle Tank Project

*101. SHRIMATI KAILASHPATI:
SHRI KAPIL VERMA:†

Will the PRIME MINISTER be pleased to state:

(a) when the Main Battle Tank Project was proposed to be completed according to the original schedule and what is the latest schedule for its completion;

(b) what are the reasons for the delay in this regard;

(c) what progress has been made so far in this regard;

(d) what was the original outlay envisaged for the project and what is the final outlay now expected; and

(e) the amount of money spent on it so far?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (DR. RAJA RAMANNA): (a) The production of the Main Battle Tank was anticipated to start by 1984. Meanwhile due to changes in Qualitative Requirements by the Army, the production plans were revised. As per present plan, the production of the tank is expected to commence by 1992.

(b) (i) Changes in qualitative requirements by the Army.

(ii) Requirement of additional prototypes by the Army.

(iii) Requirement of pre-production series tanks.

(iv) More realistic assessment of technical and user trials.

(c) 12 prototypes including 2 fully integrated prototypes of tank "ARJUN" have been fabricated. More than 12500—Kms track mileage has been accumulated as part of R&D and Users-cum-R&D evaluation. As part of weapon System trials a total number of 754 rounds of different types of ammunition have been fired for evaluation of range, accuracy and consistency of the system. The immunity has already been tested to our satisfaction. Two fully integrated prototypes have undergone mobility and firing trials in desert area of Rajasthan. These tanks will be subjected to user's MBT Cell proving trials during ensuing summer of 1990.

(d) The project was sanctioned originally at a cost of Rs. 15.50 crores. In Oct., 80 and in May 87, the estimated cost of the project was revised to Rs. 56.55 crores and Rs. 280.80 crores respectively.

(e) The amount of money spent on the project so far is Rs. 189.10 crores including the commitments as on 31 Dec., 89.

SHRI KAPIL VERMA: The colossal spurt in cost and projected delay in its completion has caused dismay and concern to all of us. The Minister has today announced that the production will start in 1992. Sir, about three years ago, the Defence Minister had announced in this House that it would start in 1990. So, there is an increase the delay by two years. I want to know the reason why the date has been again shifted by two years. I also want to know why could not the planners anticipate in planning of the schedule the strong possibility of updating of the requirtments by the Army. The PAC has already examined the reasons given today by the Minister and they have rejected it. The cost has risen by 17 times. You must have been the original estimate which was Rs. 15.50 crores.

†The question was actually asked on the floor of the House by Shri Kapil Verma.

MR. CHAIRMAN: What is your question?

SHRI KAPIL VERMA: I want to know what is the current estimate. Will the Minister assure the House that he will not ask for more money and that he will not seek revised estimate upwardly from Rs. 280 crores. Will he also assure the House that it does not become obsolete technology? Will the Minister assure the House that it will be perfect and there will be no need for further technological changes in the Tank because the technology adopted today might become useless by the time this *hawa-mahal* is completed?

DR. RAJA RAMANNA: Mr. Chairman, I knew there would be some critical remark on the MBT but the people don't realise that the Main Battle Tank is a very complicated and complex unit required by the Army. Main Battle Tank is a simple word but it consists of development of the engine, the armour, the optics, the suspension and a whole series of things. It is practically a world of its own. In foreign countries it has taken almost 15 years to develop such units before they went into production. So,...

SHRI SURESH KALMADI: They take only ten years.

DR. RAJA RAMANNA: 10—15 years in many cases, I can quote. Therefore, I was somewhat surprised that the questions which are asked I will try to answer are in the spirit of an attack rather than an appreciation. Of course, people may derisively say...

SHRI SURESH KALMADI: In the last ten years the price has risen by 17 times... (*Interruptions*).

MR. CHAIRMAN: Why are you interrupting?

DR. RAJA RAMANNA: The appreciation point which I referred to in the MBT...

SHRIMATI JAYANTHI NATARAJAN: We do not want any homilies.

MR. CHAIRMAN: I have not asked you to speak.

SHRI KAPIL VERMA: No comments on the question.

SHRI SURESH KALMADI: He is casting aspersions on the question.

MR. CHAIRMAN: The rule is very clear and I want to repeat it. Anybody other than the questioner speaking will not go on record, and I request you with folded hands to stop this practice.

DR. RAJA RAMANNA: Can I continue, Sir?

MR. CHAIRMAN: Yes.

DR. RAJA RAMANNA: The hon. Member has definitely made some aspersions about the cost today. He wants to know the details. I have the details with me because as I told you the MBT when it is complete is approaching the ultimate possibility of the requirements of the tank for the future. It is not something like the old tanks where it is repeated or bought in a shop by some other country which can easily be bought but it is something which is looking forward right into the end of this decade, next century so that we do not go on improving the basic design. The constant smaller design improvements will go on but when I say there should be an appreciation, you derided me. I have great faith in the scientists who are developing it and without that faith in the scientists, we cannot progress. If you ask me, what is there to be so proud of, I would say the Kanchen armour is probably the finest armour ever developed in the world. I stand by that statement having been in the science business for a long time. The optics have been developed completely here. The weakness is the engine. We have not yet developed any engines in this country and perhaps we took up too ambitious a project for developing an engine all by ourselves. The engine is at 1500 HP, of course, it is 500 HP in natural aspiration without turbo charging. But 1500 HP is a very, very powerful thing and we said all right, let us do it because that is the ultimate, that is what the Westerners are trying to achieve. Now, I would like

to say, yes in the first instance, let us have foreign armour, let us get a German armour and see if it works and on the basis of these, these tanks are running around and I have a feeling though I have not got an assurance immediately that the Army will soon place an order and perhaps Members here are slightly influenced by what has appeared in the Press but we know from our experience that you cannot take everything in the Press as absolute truth. But the fact is that the army is conducting trials in Rajasthan now. The trials are in progress and when you have trials, it means that they are greatly interested in this tank as a tank of the future. I am sure, if I give further details of the cost and things like this which I think, probably, is going into some more details, because people did say that my answer itself was too long, I think, the Members will realise that there has been a big progress in the development of this tank which can be devided into many parts. First of all, it was shown at on Republic Day parade and it is true that it was having components from outside. But now gradually, all that is being reduced and only the tank is at question and the Indianisation of the tank is also in progress. We have had some good results but at the moment, the German imported Power pack for the tank is being used and I think in a short time, we will be able to prove to the army that it can stand up to the specifications and in 1992, the production will definitely start. This is my statement.

MR. CHAIRMAN: He wants to know what is your estimated cost now.

DR. RAJA RAMANNA: I have got the latest estimate, Sir. Just give me one chance. It is not quite clear what type of estimate they want. For instance, the likely estimated production cost of the "M.B.T. Arjun" will be Rs. 3.50 crores per tank approximately but the total development cost... (*Interruptions*)...

SHRI KAPIL VERMA: The total cost revised in 1987 is Rs. 280 crores. I want to be assured that it is not further revised.

DR. RAJA RAMANNA: Well I cannot give an assurance to the House...

MR. CHAIRMAN: What is your estimate now?

DR. RAJA RAMANNA: It is with me. It is Rs. 280 crores. Well it has been mentioned in the statement somewhere. I will just find out.

THE PRIME MINISTER (SHRI VISHWANATH PRATAP SINGH): Sir in May, 1987 the estimate is about Rs. 280.80 crores. That has already been stated in the answer and the hon. Member knows it.

SHRI KAPIL VERMA: I asked, is it going to be revised?

SHRI VISHWANATH PRATAP SINGH: Mr. Kapil Verma, let me go to the next sentence. Battle tank is used in the battle. Let me fire the gun. Why are you so impatient? Listen to me. I am coming to it. Now, the hon. Member has raised a question that this is an estimate of 1987 and asked what is the position now and whether it will further escalate or not. Sir, in this, when he comes to cost escalation, there are certain other elements like foreign exchange variations and inflation. So these things and other variables which we cannot exactly identify, what will be the foreign exchange position's impact on the total cost—and this is also a research project in which we are developing our engine—it may not be possible exactly to tell this thing but certainly it will go up. I share your concern that undue escalation should not take place because of delay or any other negligence. That will be our effort but certain factors which cannot be exactly identified, today that has to be allowed.

SHRI KAPIL VERMA: Sir, the Minister has made a statement and he has complained that we have been asking in a spirit of attack or something of that kind. I realise that the

Minister is new to Parliamentary life but he should not expect a pat on his back for a project which has been delayed for more than 16 years and the cost have gone up 17 times and the foreign exchange has gone up 44 times. Anyway, I am coming to the present Government. (*Interruption*). Let me ask my question. Let us not waste time now. Now, there have been reports in the press that certain snags have been noticed in the mobility and firing style of the two fully integrated proto-types which as the Minister said, are under trials in the Rajasthan desert and the press report say, 'inaccuracy in firing.' (*Interruption*). I am asking about these snags. I want to know whether the press report is correct or not...that there has been inaccuracy in firing and that there has been excessive weight and there is faulty suspension. I want to know whether it is correct or not. Also, the tank was to be fully indigenous. But all the sub-systems are now imported and even the imported systems are not well-integrated. I want to know the correct position.

DR. RAJA RAMANNA: Press reports are not always reliable.

MR. CHAIRMAN: You have already said that.

DR. RAJA RAMANNA: I have said that before. Therefore, when they say there are inaccuracies in firing, inaccuracies in firing will always be there. But to reduce the probability of error is what the scientists try to achieve. These tests were carried out and some errors were determined. But now they are being tested again with the improved version. This is something which goes on constantly in the improvement of firing. That is the first comment that he made.

On the question of weight, the weight is fixed. In fact, it is the users who tell us what is the weight to thrust ratio which we should maintain and it remains the same. Otherwise, users could not even touch it. In this way, many trials are conducted only to find out what the weaknesses are. After the trials are done, the weaknesses are corrected. This is the very definition of a trial. But the fact that the next set of trials has taken place shows that the users are having great interest and great faith in it. Again, I would like to reiterate, I am sorry the Member is not willing to... (*Interruption*).

MR. CHAIRMAN: Please do not comment. If you start commenting, there will be no end.

DR. RAJA RAMANNA: No, Sir. He made a statement. I am one of those who insist that people who develop at that level must be given the training.

SHRI KAPIL VERMA: It is not fully indigenous. We are having imported systems.

DR. RAJA RAMANNA: The concerned armour was developed right from scratch. The optics were built here. The engine and gun control was the only one that has been imported. But that also is being replaced by the Indian one when it is ready.

SARDAR JAGJIT SINGH AURORA: My question is, whether the prototype tanks now being used are totally indigenous in all respects including the engine and the weapon system. Or, are they still using certain systems which are imported? The second thing is, when they are going to carry out their trial in the summer, in June or whatever it is, would it be possible for some of us to go and watch because I do feel that if successfully done, it is a remarkably good job of which India can be proud?

DR. RAJA RAMANNA: Sir, the trials that are being conducted use the tanks, the prototypes, in which the Engine and gun control is a foreign one, German. But otherwise, as I mentioned earlier, it is totally indigeous. As to the interested hon. Members of Parliament visiting these trials, I will certainly take this into account, discuss it with the Prime Minister and will come back to him again.

श्री आनन्द प्रकाश गौतम : माननीय सभापति महोदय, अभी हमारे रक्षा मंत्री जी ने जो अपने उत्तर में बताया कि यह मुख्य युद्धक टैंक परियोजना का जो प्रारम्भ होना था 1984 में, अब 1992 में इसका प्रारम्भ होगा और उसके कारण बताए कि सेना द्वारा टैंक की गुणात्मक अपेक्षाओं में जो परिवर्तन हुए और टैंक के अतिरिक्त आदि रूपों की मांग आदि प्रमुख कारण है। ...(**व्यवधान**)...

श्री सभापति : आप सवाल कीजिए।

श्री आनन्द प्रकाश गौतम : तो इससे यह पता लगता है कि युद्ध की तकनीकों में जो परिवर्तन आ रहे हैं, उसमें हमारे देश में भी कुछ अनुसंधान के कार्य चल रहे होंगे कि जैसे-जैसे युद्ध की तकनीकों में परिवर्तन हो रहे हैं, उस तरह से नए-नए टैंकों का अविष्कार हो, तो मैं यह जानना चाहता हूं कि इस प्रकार की कोई अनुसंधान योजना हमारे देश में चल रही है क्या और उसको देखते हुए और टैंकों के नए रूपों व गुणात्मक अपेक्षाओं के परिवर्तन की संभावनाओं को ध्यान में रखते हुए, यह जो 1992 में योजना प्रारम्भ होगी, उसके पूरा होने में कितना समय लगेगा ?

DR. RAJA RAMANNA: In 1992, the production starts. All the development will have been completed and the design will be frozen by then. So, there is no question of development when the production starts except a new generation for which the new developments in the laboratories will be put in. But, as I said earlier, the MBT is designed so that it looks to the future; it has got a lot of things which the latest abroad has and all this is being developed in the country.

SHRI S. B. CHAVAN: Sir, I am in full agreement with the hon. Minister. While complimenting the R&D effort in this direction, we cannot be oblivious of the fact that there has been a cost overrun by a number of times, 30 times or 40 times, I would like to know from the hon. Minister what the increase is due to increase in the scope of the project and how much of it is because of inflation and other factors. That is one thing. The second question is, what the percentage of indigenisation is so far as this MBT is concerned.

DR. RAJA RAMANNA: Sir, the cost overruns which look formidable on paper are actually something which had happened over a period of time and a lot of this is due to increase in the cost of materials. There has been a tremendous increase in the last ten years and the costs have gone up very high. Then the manufacturing of proto-type is done. Manufacturing of pre-production was not in our plan, but we have to put it up and in the armour that was developed, there was some revision and that has increased the cost. That is why the total cost has gone up to Rs. 280 crores. I have the details here as to why the cost of various items have gone up which include manufacturing of proto-type, test equipment etc.

SHRI S. B. CHAVAN: I want just the break-up of the figure.

SHRI VISHWANATH PRATAP SINGH: Sir, Chavanji must be knowing why it has gone up. We want some hints from you as to why it has gone up... (*Interruptions*)...I have some inkling also and we can share together... (*Interruptions*)...

SHRI S. B. CHAVAN: That is not a reply to my question, Sir.

SHRI SUBRAMANIAN SWAMY: It is an exercise in evasion. He should openly apologise for the cost overruns that took place in his time.

DR. RAJA RAMANNA: Sir, yes I do apologise to the House for the cost overruns caused by the previous regime. ...(*Interruptions*)...

SHRI YASHWANT SINHA: I would like to know from the Minister one thing. We have been talking of cost overruns, ...(*Interruptions*)...

SHRI S. B. CHAVAN: What happened to my question, Sir?

SHRI YASHWANT SINHA: It has been answered, Sir.

SHRI S. B. CHAVAN: No, no. He cannot walk away like that. He has to reply my question.

SHRI YASHWANT SINHA: He has not walked away. He is sitting.

MR. CHAIRMAN: The Prime Minister has already replied.

SHRI S. B. CHAVAN: No, Sir. I would like to know the break-up, some of the components.

SHRI VISHWANATH PRATAP SINGH: That is what was explained. ...(*Interruptions*)...

SHRI S. B. CHAVAN: If the information is not readily available, certainly I will be happy to get it later on.

DR. RAJA RAMANNA: I would assure the hon. Member that I will give the details as soon as possible. Since he has already appreciated the test done in the laboratory, the cost overruns have gone up over a period of time and I will tell him privately as to how these things have taken place....(*Interruptions*)...

SOME HON. MEMBERS: Why privately?

MR. CHAIRMAN: He will communicate it to him. ...(*Interruptions*)...

SHRI VISHWANATH PRATAP SINGH: Sir, Chavanji knows. That is why perhaps he does not want it publicly. ...(*Interruptions*)...

SHRI H. HANUMANTHAPPA: Sir, why this private business? The House is interested to know the answer. that is why questions are raised here. It cannot be a private affair between the Defence Minister and a Member. ... (*Interruptions*)...

SHRI YASHWANT SINHA: Sir, we have been talking about cost overruns and the Minister, in the course of his reply, has mentioned that the cost per tank is perhaps Rs. 3.50 crores. Now I would like to know from him what the original estimate of the cost per tank is and what the final cost would be of the tanks which we are going to manufacture.

DR. RAJA RAMANNA: Sir, the question asked is a very difficult one to answer because we have to go back in time. ... (*Interruptions*)...

MR. CHAIRMAN: When you yourself have mentioned Rs. 3.50 crores, naturally you must have got an idea as to what the original cost was. The two are correlated and you cannot say that you have to go back in time. The question is natural—what is the original estimated cost? That is the natural question.

DR. RAJA RAMANNA: Sir, when it goes to the laboratory for development, we have no idea of the details at all; we had no idea at all. But time has gone on and it is going to sort of stabilize.

SHRI YASHWANT SINHA: When you did have the original estimate, the first estimate what was the idea then and what is it now? Let us compare it.

DR. RAJA RAMANNA: You see, the total sanctioned amount... (*Interruptions*)...

MR. CHAIRMAN: You see, he wants to know the original estimate. You yourself have mentioned the figure of Rs. 3.5 crores. What was the original estimate? That is his question and that is what he wants to know.

DR. RAJA RAMANNA: In 1972, it was Rs. 25 lakhs.

MR. CHAIRMAN: That is right. Yes, Mr. Sitaram Kesri.

श्री सीताराम केसरी : माननीय अध्यक्ष जी, आपके द्वारा प्रधान मंत्री जी से यह जानना चाहूंगा प्रतिरक्षा मंत्री जी से कि जिस समय यह मुख्य युद्ध टैंक की परियोजना की कल्पना की गयी 1984 में ...

श्री अरविन्द गणेश कुलकर्णी : टैंक के बारे में क्या है पूछने का ?

श्री सीताराम केसरी : आप नहीं जानते, टैंक में ही सब कुछ है। ऐसे टैंक के बारे में पूछ रहा हूं...

श्री सभापति : आप उनको जवाब मत दीजिये, आप सवाल करिये।

श्री सीताराम केसरी : 1984 में यह परिकल्पना की गयी तो मैं यह जानना चाहता हूं कि तत्कालीन भारत सरकार ने युद्ध और आक्रमण को मद्देनजर रखते हुये मुख्य टैंक की परियोजना में जो धन आबंटित किया, क्या वह उचित व उतना ठीक था या नहीं ? यह मैं जानना चाहता हूं।

DR. RAJA RAMANNA: Sir, the answer to this question is that when the idea of MBT was thought of in this country, we had to take into account the fact that the best tank in the forefront of development would not be available in this country because the foreign countries have their own embargoes on passing on the best equipment. As a matter of fact, from experience it has been found that if you want the best, you must be equally higher up. So, as a competence-building project it started in 1972 at a very low production cost of Rs. 25 lakhs. But, with the lapse of time we have picked up information and technology from various other places and that is why all this has been put in so that the ultimate tank can come and by ultimate tank I mean a tank having all the facilities.

MR. CHAIRMAN: But it may not be the ultimate afterwards.

DR. RAJA RAMANNA: No, Sir. There is something called the saturation point in these things.

SHRI SITARAM KESRI: Sir, I want your protection. मैंने आबंटन के संबंध में पूछा कि जो धन का आबंटन उस समय हुआ था वह उचित था ?

DR. RAJA RAMANNA: If you want me to answer this question as to what happened twenty years ago, the possibility of building a tank with the money allotted was examined, probably, at that time, with the smaller appreciation of a big machine like this. ... (*Interruptions*)...

MR. CHAIRMAN: I think you can say that you require notice and you will communicate to him later. Now, the next Question. Question No. 120.

Recruitment in the Army from Villages

*102. SHRI SURENDRA SINGH THAKUR: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the recruitment of Army personnel is being done through the Recruitment Boards created for this purpose;

(b) if so, what are the details thereof;

(c) whether Government have discontinued the practice of rural recruitment by the Recruiting Agencies visiting the villages and making on-the-spot selections;

(d) if so, what are the reasons therefor;

(e) whether Government propose to consider the recruitment of Army personnel through the Recruiting Agencies visiting the villages and selecting the prospective soldiers there; and

(f) if so, what are the details of this Scheme?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (DR. RAJA RAMANNA): (a) to (f) A Statement is laid on the Table of the House.

Statement

Recruitment into the Army is made by a properly constituted Board of Officers, including independent members from the local Station/Formation. This is done to ensure objectivity and fairness. The Board consists of the